

**Amendments to the Specification:**

Page 7 of the substitute specification, please rewrite the paragraph starting at line 4 as follows:

a layer 12 of metal oxide having a structure of which a bonding quantity of oxygen gradually decreases with increasing depth from an upper surface of the layer ~~bond with oxygen is gradually decreased as goes from the surface to the inside~~ and having a photocatalytic property responding to an electromagnetic wave with wavelength longer than that of the ultraviolet ray is formed on the surface of the catalytic material 10.

Page 16 of the substitute specification, please rewrite the paragraph starting at line 1 as follows:

On the surface of the granular material to be the core of the catalytic material, the metal oxide layer which is a metal oxide exerting the photocatalytic property by oxidation as mentioned above and has the tilting structure of which a bonding quantity of oxygen gradually decreases with increasing depth from an upper surface of the layer ~~bond with oxygen is gradually decreased as goes from the surface to the inside~~ (called as "oxygen deficit tilting structure" in this specification) is formed, and when the fuel to be reformed passes through the fuel reformer 1, it is brought into contact with this metal oxide layer formed on the surface of the catalytic material and reformed.

Serial No. 10/591,463  
Amdt. dated November 18, 2008  
Reply to Office action of May 12, 2008

- 3 -

Page 26 of the substitute specification, please rewrite the paragraph starting at line 14 as follows:

As a comparative example, a similar running test was carried out using a fuel reformer in which 800 pieces of titanium lath with the thickness of 0.2mm in Table 2 is molded in the disk shape with the diameter of 100mm were inserted in the same casing of the fuel reformer of the present ~~the present~~ invention.